UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGIONS 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 25 2007

CERTIFIED MAIL 7001 0320 0005 8920 6205
REQUEST BY SENDER

REPLY TO THE ATTENTION OF: **WC-15J**

Milco Dairy, LLC
(b) (6) [redacted]

RE: Administrative Order V-W-04-AO-17

Dear Mr. and Mrs. Niessen:

Enclosed is the report for the United States Environmental Protection Agency (U.S. EPA) inspection conducted at Milco Dairy, LLC (Dairy) on October 18, 2006. The purpose of this inspection was to determine the Dairy's compliance with the terms of the above referenced Administrative Order.

During the inspection U.S. EPA found deficiencies with the best management practices required in Milco Dairy's NPDES Permit ING806068 are noted below:

1. Continual clean up of the cement pads is required on the west side of the freestall barns especially before anticipated precipitation events. This action should be recorded on the self-inspection forms.
2. The excess silage that was cleared from the eastern side of silage pad was discarded to the east of the silage pad, which will discharge into the unnamed tributary.
3. Vegetation needs to be established on the berms of the new process wastewater and new earthen manure storage structure. Proper maintenance to the berms of the process wastewater pond and new earthen manure storage structure is required, so that the erosion rills that have formed do not compromise the integrity of the structure.
4. Maintain records on the amount of precipitation before and after land application.
5. Continual inspections and recording of the condition of the silage pad is required. The inspection records should include:
    a. Checking for cracks in the cement berm, to ensure that discharges are not occurring.
    b. Managing the silage so that the pad is not overfilled and allowing discharges of the pollutants to occur.
    c. If overfilled, proper disposal of excess silage is required.
6. Record on the laboratory sheets the method of analysis for the soil sampling done on the land application fields.

Please correct these deficiencies noted above and written confirmation to the U.S. EPA. Please send the letter to:

U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604
Attn: Cheryl Burdett (WC-15J)

After the U.S. EPA receives confirmation that the actions 1-6 above have been completed, we anticipate that all requirements of Administrative Order V-W-04-AO-17 will have been satisfied.

If you have any questions on this matter, please contact Cheryl Burdett of my staff at (312) 886-1463.

Sincerely,

Patrick F. Kuefler, Chief
Section 2
Water Enforcement Compliance Assurance Branch

Enclosure

cc: Randy Jones, IDEM
Julia Arquette, IDEM

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NPDES INSPECTION

I. IDENTIFICATION

A. Facility Name and Address:	Milco Dairy, LLC (b) (6) [redacted] Home phone#: (b) (6) [redacted] Cell phone #: (b) (6) [redacted]
B. Permit Status:	NPDES Permit #: ING806068
C. Responsible Official:	Mr. Nico Niessen Owner/Operator Mrs. Millie Niessen Owner/Operator Home Phone #: (b) (6) [redacted] Cell Phone #: (b) (6) [redacted]
D. Facility Contacts	Same As Above
F. Inspection Participants:	Cheryl Burdett, U.S. EPA Arnold Leder, U.S. EPA William Tong, U.S. EPA Tim Holtz, IDEM
G. Date of Inspection/Arrival Time:	October 18, 2006 at 2:26 PM EST
H. Report Prepared By:	Cheryl Burdett November 1, 2006

II. FACILITY OPERATIONS AND INFORMATION

Facility Background:

At the time of the October 18, 2006 inspection, Milco Dairy, LLC had 1500 milking dairy cows and 350 dry cows. Construction had been completed for the new earthen manure storage structure and a new process wastewater pond. Milco Dairy had also deepened their silage pad and put a perimeter berm around the silage to contain process wastewater runoff. The Dairy was operating under a General National Discharge Elimination System (NPDES) Permit ING806068 approved by Indiana Department of Environmental Management (IDEM).

NPDES Permit Inspection:

U.S. EPA conducted a National Discharge Elimination System Permit inspection to determine overall compliance with the permit and the Administrative Order V-W-04-AO-17.

Facility Walk-Through

1. Milco Dairy cleared the excess silage from the east side of the silage pad to allow for the precipitation to drain to the south into the new process wastewater pond. This appeared to have corrected the problem of the discharge of process wastewater to the unnamed tributary. However, the silage was discarded to the east of the silage pad, which during a precipitation event will discharge into an unnamed tributary. This was explained to Mr. and Mrs. Niessen, who indicated that it would be corrected.

2. At the time of the inspection, there was a leak along the southeastern side of the silage pad that had been contained by discharging into the process wastewater pond; however the eastern side of the silage pad still needs to be inspected regularly for other leaks, to ensure that that process wastewater does not discharge to the unnamed tributary.

3. Tim Holtz, IDEM provided Millie Niessen with a precipitation event form so that precipitation events can be recorded prior to and after land application. Land application should not occur if a ½" of rain is expected within 24 prior to or after land application. This was also explained to Mr. and Mrs. Niessen.

4. The laboratory reports onsite failed to record the method of analysis for the soil sampling for fields and for the manure and process wastewater samples. Mr. and Mrs. Niessen stated that they would call the laboratory and have the information added to the laboratory sheets that they receive.

5. Vegetation needs to be established on the berms of the new process wastewater and new earthen manure storage structures. The berms also need to maintained, so that the rills that have formed do not cause the berm to collapse.

6. In July 2007, Phosphorus thresholds levels will need to be analyzed and recorded. Concentrated levels will need to be maintained in order to apply on fields. The Dairy should anticipate the requirement, so that it will have fields that are available for land application.

CONCLUSION

At the time of the inspection, Milco Dairy had addressed the discharge of process wastewater from the silage pad that been noted during the previous inspection. All aspects of the Administrative Order V-W-04-AO-17 have been completed. However,

Milco Dairy still must address some items required by its NPDES Permit and Administrative Order V-W-04-AO-17 as noted above that were stated above in the facility walk-through.

INDIANA NPDES CHECKLIST

FACILITY NAME: *Milco Dairy*

NPDES #: ING 806068

DATE OF INSPECTION: *October 18, 2006*

(1) **There must be no discharge of manure, litter, or process wastewater pollutants to waters of the state.**
Milco Dairy had a discharge on May 18, 2006, which was the last inspection conducted by the U.S. EPA prior to the October 18, 2006 U.S. EPA inspection. At the time of the May 18, 2006 inspection, the silage was overloaded on to the pad causing the leachate to discharge at the northeast corner. The silage problem was corrected as of the October 18, 2006 inspection and was no longer discharging process wastewater to waters of the state.

(2) **Install a depth marker in all open surface liquid impoundments that indicates the minimum capacity necessary to contain the runoff and direct precipitation of the twenty-five (25) year, twenty-four (24) hour rainfall event, or two (2) feet of freeboard, whichever is greater.**
The depth markers are installed, so that the depth of liquid impoundments are closely monitored and reported and to keep the level of freeboard below two feet.

(3) **Whenever rainfall events cause an overflow of process wastewater from a structure designed, constructed, operated, and maintained to contain all process wastewater including the direct precipitation and runoff from a twenty-five (25) year, twenty-four (24) hour rainfall event for the location of the point source, process wastewater pollutants in the overflow may be discharged into waters, provided that the production area is operated in accordance with the requirements of subdivisions (2) and (4) through (8) of this subsection.**
At the time of the October 18, 2006 inspection Milco Dairy had adequate containment required by their NPDES Permit.

(4) Conduct weekly visual inspections of all the following:

(A) Storm Water diversion devices
Yes, records of the daily inspection were being kept on the storm water diversion devices at the facility.

(B) Runoff diversion devices

Yes

(C) Devices channeling contaminated storm water to the process wastewater and manure storage structure.
Yes

(D) Manure, litter, and process wastewater impoundments, noting the level in open surface liquid impoundments as indicated by the depth marker.
Yes

(5) Conduct daily inspection of all water lines that may come in contact with or impact manure, litter, or process wastewater in and around the production area. Such lines include drinking water lines for livestock.
Yes

(6) Correct any deficiencies found in inspections as soon as possible.
Yes, the deficiency with the silage pad discharging was corrected; however, excess silage was not properly removed. The excess silage was cleared, by discarding it on the eastern side of the silage pad, which discharges into an unknown tributary. This was mentioned to Millie and Nico Niessen, Owner/Operator of Milco Dairy. Millie explained that the contractor discarded the excess silage without their knowledge and will make sure that it correctly discarded next time.

(7) Do not dispose of mortalities in a liquid manure or process wastewater system. Mortalities must be handled in such a way to prevent the discharge of pollutants to surface water.
Mortalities are stored on concrete manure pad that discharges to the sand pit. Mortalities are picked up within 24 hours of being called.

(8) Maintain, within the operating record required under section 17 of this rule, for a period of five (5) years from the date of creation, a complete copy of the following records:

(A) Records documenting self-inspections
Self-inspection were recorded in a computer database before April 2006 after April 2006 a hard copy of the self-inspections were kept on file and recorded IDEM self-inspection sheets.

(B) Weekly records of the depth of manure and process wastewater in the open surface liquid impoundment, as indicated by the depth marker.
Yes, Mrs. Niessen is recording the information from the depth markers on a weekly basis.

(C) Records of actions taken to correct deficiencies. Deficiencies not corrected within thirty (30) days of discovery must be accompanied by an explanation of the factors preventing immediate correction.
Yes, inspections problems and corrections are recorded on the IDEM forms.

(D) Records of mortality management practices
Yes, Milco Dairy was recording the mortalities as of April 2006.

(E) Records documenting the current design of any manure, litter, or process wastewater storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.
Yes, Milco Dairy has the as-builts for the old construction and the new construction.

(F) Records of the date, time, and estimated amount of any overflow.
Milco Dairy did not report the discharge from the silage pad on May 11, 2006 when they overstocked the pad and process wastewater discharged into an unknown tributary. However, Mr. or Mrs. Niessen did not realize it was discharging until U.S. EPA informed them of the problem and what the problem may be.

(G) Annual Report due February 15
Yes, the 2005 Annual Report had been submitted.

(H) For land application areas of new source and existing dairy, veal, swine, poultry, cattle other than mature dairy cows, horse, sheep, duck, and heifer CAFOs, the following records must be maintained in the operating record for a period of five (5) years from the date of permit coverage.

(1) Expected crop yields
Did not have a predicted yield number for crops

(2) The date or dates manure, litter, or process wastewater, and soil sampling.
Soil Analysis was done for each field application. Yes, the date was recorded for each field applied on. The amount of manure given away was recorded on the forms.

(3) Precipitation events at the time of application and for twenty-four (24) hours prior to and following application.
No, Milco did not record the precipitation events prior and following application, Tim Hotz, IDEM had a form that he provided to Millie Niessen.

(4) Test methods used to sample and analyze manure, litter, process wastewater, and soil.

No, the laboratory did not indicate, which analysis was used on the soil samples. Millie Niessen will call the laboratory and have this written on the laboratory analysis sheets.

(5) Results from manure, litter, process wastewater, and soil sampling.

Yes, the levels of nitrogen and phosphorus were recorded on the IDEM forms.

(6) Explanation of the basis for determining manure, litter, and process wastewater application rates.

Yes, there was a formula for the determining the manure, litter, and process wastewater application rates.

(7) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater.

Yes, the calculations were shown for nitrogen on the sheet, but the formula for phosphorus was not shown.

(8) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.

Yes, the calculations were shown for nitrogen and phosphorous for the fields applied on.

(9) The method used to apply the manure, litter, or process wastewater.

Injects and surface applies and it is done by tanking it to the fields. Arnie suggested irrigating with the liquid, but at the moment do not have the equipment.

(10). **Date(s) of manure, litter, and process wastewater application equipment inspection.**

Yes, this was recorded.

(11). **USDA soil survey maps of currently available land application sites.**

Yes, this was available in their nutrient management plan.

Photo 1: Front of the freestall barns, which shows the added amount of waste that is scraped out of the barns with the automatic scrapers.
Facing: North

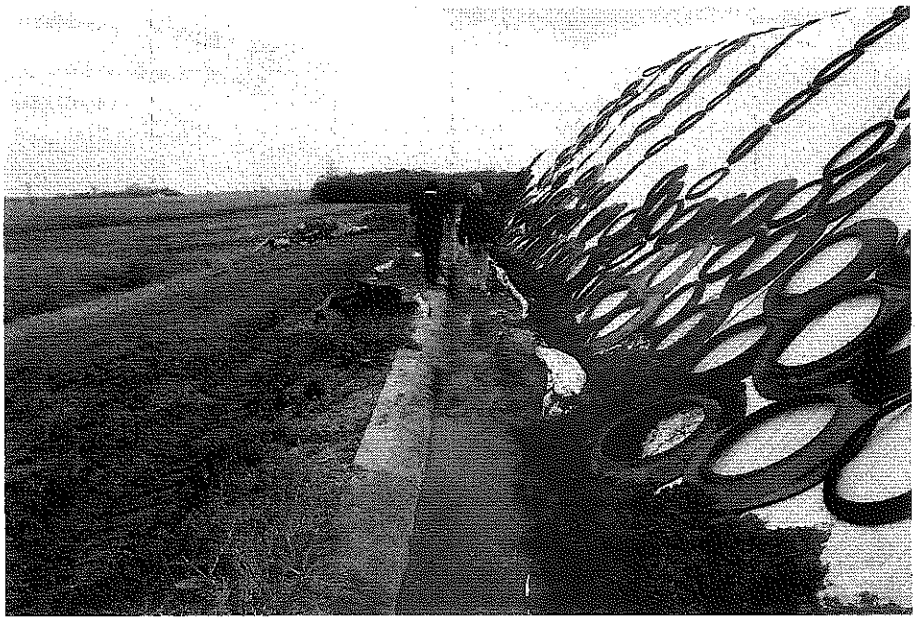

Photo 2: Walking on the east side of the silage pad, U.S. EPA inspectors noticed that a pathway had been cleared to allow for process wastewater to drain to the south. However, the excess silage was discarded on the east side of the berm, which during a precipitation event would allow the discarded silage to discharge into the unnamed tributary to the east.
Facing: South

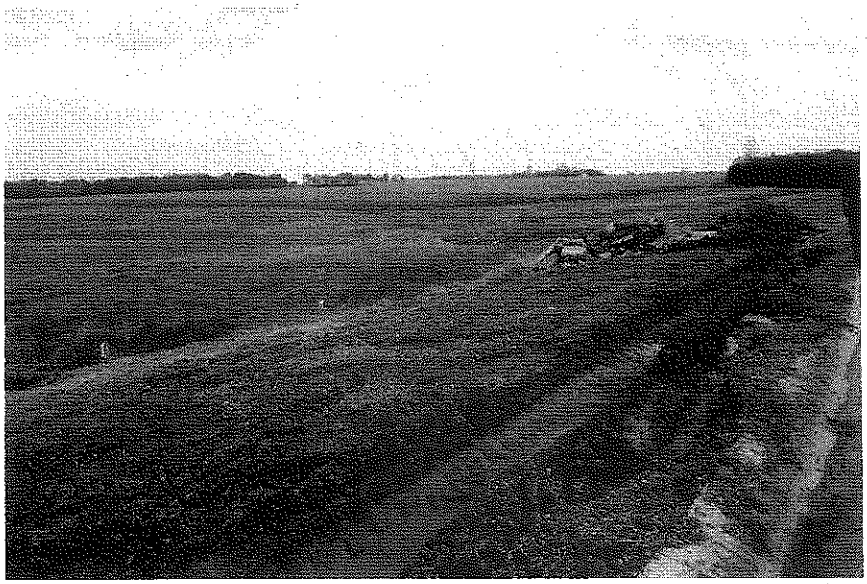

Photo 3: Close up of the excess silage that was discarded from the silage pad to allow process wastewater to flow around the back of the silage pad and into the process wastewater pond.
Facing: South

Photo 4: Close up of crack in the berm of the silage pad draining into the process wastewater pond.
Facing: NA

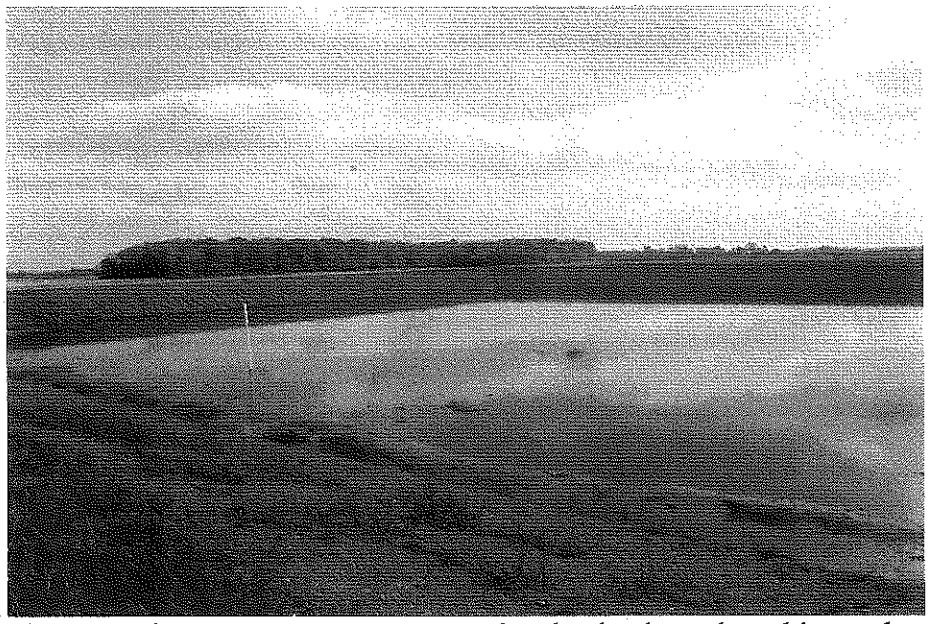

Photo 5: The process wastewater pond and a depth marker, this pond collects all wastewater on the east side of the freestall barns and silage pad. Grass was planted and was starting to come in.
Facing: Northeast

Photo 6: New earthen manure storage structure, which manure is pumped from the old earthen manure storage structure into this new earthen manure storage structure when it gets close to the 2 feet of freeboard.
Facing: South

Photo 7: The new earthen manure storage structure has deep rills in the berm, which could cause the berm wall to collapse if not maintained.
Facing: NA

Photo 8: This is the existing earthen manure storage structure, which is filled with solids. and pumped into the new earthen manure storage structure located to the east.
Facing: West

Photo 9: This is the clean water system to drain the roof water away from the production area. Some debris gets into the clean water system, but for the most part is kept pretty clean.
Facing: South